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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,000	12/20/2001	Thomas Leonard Schwartz	81505JDL	2402

7590 02/09/2005

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EXAMINER

MCALLISTER, STEVEN B

ART UNIT PAPER NUMBER

3627

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/028,000

Applicant(s)

SCHWARTZ ET AL.

Examiner

Steven B. McAllister

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-15 and 17-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-15 and 17-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Note Regarding Examination

As required by MPEP 2144.03(C), it is noted that in the previous office action, certain subject matter was deemed old and well known in the art. Since any traversal of this assertion is required to be made in the response to the office action and since no traversal was made, those statements are considered to be admissions of prior art.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 17-25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 17-25 are non-statutory because the method lacks a claimed technological nexus with the computing apparatus performing the steps. (It is noted that claiming a processor carrying out the method steps remedies this.)

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 6-9, 11 are rejected under 35 U.S.C. 102(b) as anticipated by LoBiondo et al (5,305,199).

LoBiondo shows a plurality of pieces of equipment with a plurality of components, each having a predictable lifetime; an inventory of replacement parts; a computational element coupled to the equipment; and a mechanism for managing inventory by tracking lifetime of components through usage.

As to claim 2, the computational element has a user interface (touch screen) and the mechanism, comprising the inventory tracking module, is coupled to the computational element and has an input device that allows input and deletion of pieces of equipment.

As to claim 6, LoBiondo shows an inventory notification that is activated when the number of replacement parts fall below a predetermined level.

As to claims 7 and 8, LoBiondo shows all elements of the claim. It is noted that the parameters are used in the inventory analysis which results in a decision whether or not to order. The decision whether or not to order affects quantities order (zero or a certain non-zero quantity) and frequency.

As to claim 9, LoBiondo shows rate of use as a parameter.

As to claim 11, LoBiondo shows a predictable lifetime that can change with use of the printing system (the life of the cartridges change depending on the amount of use).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Manchala et al (6.405,178).

Manchala shows providing serviceable equipment with a plurality of replaceable parts and providing inventory of the parts. It inherently shows calculating a predetermined life span of the parts, since it shows replacing the parts at a predetermined threshold. It further shows creating a system for tracking the predicted life; and managing an inventory of replacement parts using the tracking system.

Claims 1-5, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Thieret et al (5,923,834).

Thieret shows at least one piece of equipment having a plurality of components with predictable lives; an inventory of replacement components; and an inventory manager managing the inventory by tracking the predictable lifetime of the components via usage of the equipment.

As to claims 2-5, 11, and 12, all elements of the claims are shown by Thieret.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over LoBiondo et al in view of Manchala et al (6,405,178).

As to claim 3, LoBiondo shows all elements except comparing at least one of the predictable lifetimes of the components against a threshold based on equipment usage. Manchala shows this element. It would have been obvious to one of ordinary skill in the art to modify the apparatus of LoBiondo by comparing the predictable lifetimes against a threshold in order to determine when the component needs to be replaced.

As to claim 4, LoBiondo shows that the mechanism further comprises inputs from sensors for counters providing usage updates. It does not explicitly show a threshold against which each component's usage is compared, or a notification when that threshold is reached. Manchala shows comparing the usage against a threshold and triggering a notification when that threshold is reached.

As to claim 5, LoBiondo in view of Manchala show all element except that the threshold equals on lifetime. However, to do so is notoriously old and well known in the art. It would have been obvious to one of ordinary skill in the art to compare the usage to one lifetime in order to maximize use of the component.

Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over LoBiondo et al.

As to claim 12, LoBiondo shows all elements of the claim except computing predictable lifetimes when a component is replaced. However, it is notoriously old and well known in the art to do so. It would have been obvious to one of ordinary skill in the art to modify the apparatus of LoBiondo by computing the lifetime value at that point in order to capture the effect of a possible changing use environment.

As to claims 13 and 14, LoBiondo shows all previously recited elements, and show periodic reporting of page count for each of a plurality of printers. They do not show that the period is daily. However, daily reporting is notoriously old and well known in the art. It would have been obvious to one of ordinary skill in the art to further modify the apparatus of LoBiondo by providing daily reporting in order to ensure that abrupt changes in use are detected in a timely manner.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over LoBiondo et al in view of Manchala et al.

LoBiondo shows all elements of the claims except creating an order for a predetermined number of shipments within a given time period. Manchala shows this element. It would have been obvious to one of ordinary skill in the art to further modify

the apparatus of LoBiondo in order to provide automated ordering upon detection of a low remaining life of a part.

Claims 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manchala et al in view of LoBiondo et al.

As to claim 18, Manchala et al show all elements except that the system uses a set of parameters based on said predicted life span of said components to determine quantities on reorder parts. LoBiondo et al shows such parameters which are used in determining whether to reorder (and which therefore affect order quantity). It would have been obvious to one of ordinary skill in the art to modify the method of Manchala by using parameter based on predicted life to determine quantities in order to ensure that the on-hand inventory reflects current needs.

As to claim 19, Manchala et al show all elements except that the system uses a set of parameters based on said predicted life span of said components to determine frequency of reorders. LoBiondo et al shows such parameters which are used in determining whether to reorder, and therefore affects frequency. It would have been obvious to one of ordinary skill in the art to modify the method of Manchala by using parameter based on predicted life to determine frequency of orders to ensure that the on-hand inventory reflects current needs.

As to claim 20, Manchala shows all elements except having a set of parameters including rate of use and determining a replenishment period for the components. LoBiondo shows these steps. It would have been obvious to one of ordinary skill in the

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art to modify the method Manchala by determining rate of use and a replenishment period in order to ensure that inventory reflects current needs.

As to claim 21, it is noted that Manchala in view of LoBiondo show the equipment being a printing system, and that the creating step further comprises that the tracking system is coupled to the inventory to receive rate of use data.

Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manchala et al in view of LoBiondo et al as applied to claim 19 above, and further in view of Nagira et al (5,666,585).

Manchala in view of LoBiondo show all elements except determining a page life from rate of use. Nagira shows this element. It would have been obvious to one of ordinary skill in the art to further modify the method of Manchala by determining a page life in order to facilitate tracking of remaining life via the existing counters.

As to claim 24, Manchala in view of LoBiondo and Nagira show all previously recited elements, and show periodic reporting of page count for each of a plurality of printers. They do not show that the period is daily. However, daily reporting is notoriously old and well known in the art. It would have been obvious to one of ordinary skill in the art to further modify the method of Manchala by providing daily reporting in order to ensure that abrupt changes in use are detected in a timely manner.

As to claim 23, Manchala in view of LoBiondo and Nagira show all elements of the claim except computing page life each time a component is replaced. However, it is

notoriously old and well known in the art to do so. It would have been obvious to one of ordinary skill in the art to recalculate page life each time a component is replaced in order to capture the effect of a possible changing use environment.

Claims 1-9 and 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thieret et al (5,923,834) in view of LoBiondo.

As to claims 1 and 17, Thieret shows a system and method calculating predetermined life span of the replaceable components and tracking the predicted life spans. It does not explicitly show managing the inventory using the tracking. LoBiondo shows this element. It would have been obvious to one of ordinary skill in the art to modify the method of Thieret by managing the inventory, as taught by LoBiondo in order to ensure a stable supply of replacement parts.

As to claims 2-9, it is noted that Thieret in view of LoBiondo show all elements.

As to claim 18, Thieret show all elements except that the system uses a set of parameters based on said predicted life span of said components to determine quantities on reorder parts. LoBiondo et al shows such parameters which are used in determining whether to reorder (and which therefore affect order quantity). It would have been obvious to one of ordinary skill in the art to modify the method of Thieret by using parameter based on predicted life to determine quantities in order to ensure that the on-hand inventory reflects current needs.

As to claim 19, Thieret show all elements except that the system uses a set of parameters based on said predicted life span of said components to determine

frequency of reorders. LoBiondo et al shows such parameters which are used in determining whether to reorder, and therefore affects frequency. It would have been obvious to one of ordinary skill in the art to modify the method of Thieret by using parameter based on predicted life to determine frequency of orders to ensure that the on-hand inventory reflects current needs.

As to claim 20, Thieret shows all elements except having a set of parameters including rate of use and determining a replenishment period for the components. LoBiondo shows these steps. It would have been obvious to one of ordinary skill in the art to modify the method Thieret by determining rate of use and a replenishment period in order to ensure that inventory reflects current needs.

As to claim 21, it is noted that Thieret in view of LoBiondo show the equipment being a printing system, and that the creating step further comprises that the tracking system is coupled to the inventory to receive rate of use data.

Response to Arguments

Applicant's arguments filed 11/23/2004 have been fully considered but they are not persuasive.

Regarding LoBiondo, the examiners respectfully disagrees with the Applicant's position. While paper and ink may be consumables, LoBiondo discloses toner cartridges, the cartridges which are printer components having a predictable lifetime. By tracking the ink or toner usage, the lifetime of the cartridge is tracked and predicted.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven B. McAllister whose telephone number is (703) 308-7052. The examiner can normally be reached on M-Th 8-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert P. Olszewski can be reached on (703) 308-5183. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Steven B. McAllister

STEVE B. MCALLISTER
PRIMARY EXAMINER